LEHMAN TRIKES

Leader of the Three World

Renegade

2000-06 H-D FLS SOFTAIL MODELS
Installation Instructions

***Fat Boy models require separate exhaust brackets**

June 2014

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General Safety Information

This kit is designed to be installed by a competent technician. Improper installation can affect the safe operation of your trike, which could also result in serious injury or death. Make sure you have a complete understanding of the work to be preformed. Unqualified installers are urged to have the unit installed by a trained technician.

- Always protect yourself when the vehicle is in the air. Make sure the vehicle is properly supported anytime you use a hoist or jack.
- Always use the proper tools.
- Protect your eyes by using proper safety glasses or goggles.
- Read through the installation instructions before you begin. Make sure you have all the proper tools, parts and skill set to perform the installation safely and completely.

UNDERSTANDING SAFETY LABELS & INSTRUCTIONS

READ AND BECOME FAMILIAR WITH ALL WARNING, CAUTION SYMBOLS AND STATEMENTS LISTED BELOW AND IN THE TEXT OF THIS MANUAL BEFORE YOU BEGIN WORK.

DANGER, WARNINGS & CAUTION SYMBOLS

This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury. Your safety is involved!

⚠ WARNING

SAFETY ALERT WARNING indicates a potential hazard that may result in severe injury or death to the operator, bystander or person (s) inspecting or servicing the vehicle.

⚠ CAUTION

Indicates a potential hazard that may result in minor personal injury or damage to the vehicle.

CAUTION

CAUTION indicates special precautions that must be taken to avoid vehicle damage or property damage.

NOTE:

NOTE provides key information by clarifying instructions.

IMPORTANT:

IMPORTANT provides key reminders during disassembly, assembly and inspection of components.

Throughout these instructions “Front” or “Forward” refers to the front of the bike. The front of any component is the end which faces toward the front of the bike. The “Left” and “Right” hand sides refer to the position of the parts as viewed by a rider sitting on the seat, facing forward.

NOTE: The symbol HD refers to Harley Davidson. The symbol LH refers to left-hand side while seated on the bike. The symbol RH refers to the right-hand side while seated on the bike.

These instructions do not include information, specifications, or procedures relating to the motorcycle itself. For this information, refer to the factory service manual.

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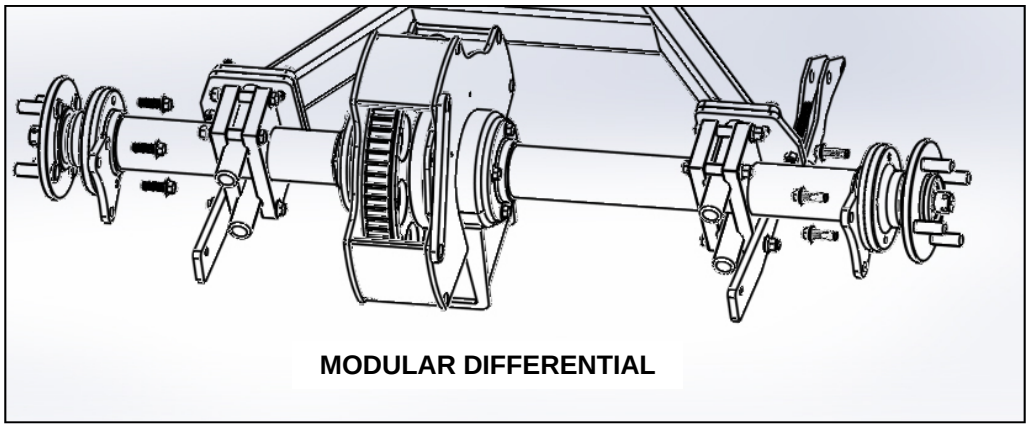
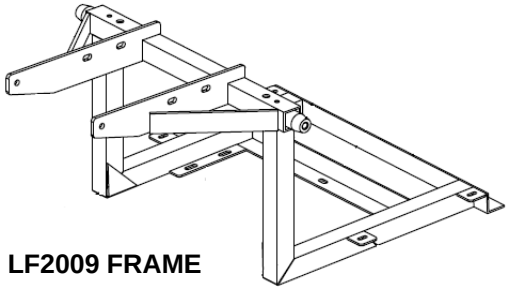
Unpacking the Kit

The crate contains the following:

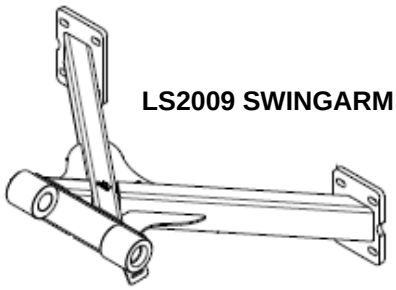
- **Body**
- **Differential with brakes**
- **Tires mounted on rims**
- **Boxed swingarm**
- **Lehman frame**
- **Hardware box containing smaller parts and bolt bags**
- **Warranty Book**
- **Owner's Manual**
- **Packing/parts list**



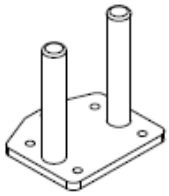
MODULAR DIFFERENTIAL



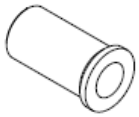
LF2009 FRAME



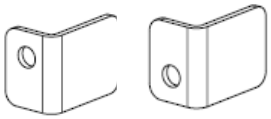
LS2009 SWINGARM



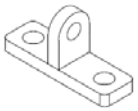
LP1038 ADAPTER PLATE



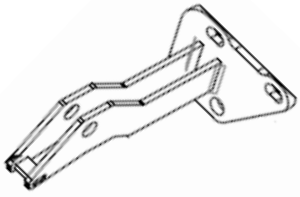
LS1186 SWINGARM SPACER



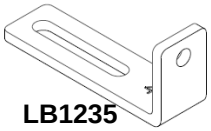
LB1117, LB1137 FUSE/ECM BRACKETS



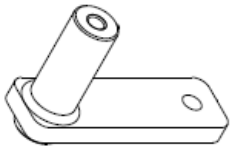
LB1294 CABLE BRACKET



LB1292 PARK BRAKE BRACKET



LB1235 BODY SUPPORT



LR0176 FOOT PEG BRACKETS

Preparing Motorcycle

The following instructions are a guide to preparing the motorcycle to accept the Lehman Trike Conversion Kit. This will assist you in removing the necessary parts to install the kit.

1. **Note motorcycle year, model and serial number, as well as Lehman serial number, located inside body, on left-side of swingarm and on warranty registration form in owner's manual**.
2. Make sure motorcycle is standing straight up and handlebars are centered. Support motorcycle with center stand under rear of transmission so it is straight up and down and handlebars are straight. The front forks or handlebars should be anchored to hold bike.

Note: Use a small level on rear wheel or disc brake to stand bike straight up. Any movement of handlebars will move bike off level. Locate reference point on bike frame that is level to use during conversion.

3. Remove seat and save mounting hardware. Softail seat mounting varies by year.
4. Disconnect battery.

Caution: Always disconnect negative battery cable first. If positive cable should contact a grounded object while negative cable is installed, resulting sparks may cause an explosion.

5. Remove the side stand, saddlebags, mufflers, and mounts.
6. Remove all of the heat shields from the exhaust pipes, except the shield located furthest forward on the front cylinder exhaust pipe.
7. Remove chrome fender rails (if applicable). Save front mounting bolts (4).
8. Remove the rear fender and then the tail lamp and wiring harness. The signal lights will be used on the Lehman body.
9. Remove the rear wheel assembly.
10. Remove the brake line from the caliper and remove the caliper. Block the line off to prevent fluid from leaking out.
11. Remove the swingarm.

Installing Lehman Swingarm

Note: If all original components of H-D swingarm are in good working order, they may be re-used.

1. Press bearing assemblies out of H-D swingarm using appropriate press collar or socket. Refer to H-D service manual.

Note: Make sure there is no dirt or powder coat material in bearing bore where bearing is to be started.

2. Press bearings into Lehman swingarm following HD service manual procedure. Bearings should bottom out on stop in Lehman swingarm collar.
3. **See Fig. 1.** Remove and discard the two circlips, and inner and outer spacers from the motorcycle swing arm.
4. Remove the swing arm bearings and press both into the Lehman swing arm LS2009.
5. **See Fig. 2**. For swingarm and belt clearance (varies by year) remove the bottom half of the plastic support and a small sections along next to the belt. Relocate any wires and plugs around for adequate clearance to the swingarm.
6. **See Fig. 3**. Lengthen the oil drain hose with the 3" hose supplied and two hose clamps for swing arm clearance.
   - (3") Hose– CH1015
   - (2) Clamp– CC2009

Fig. 1

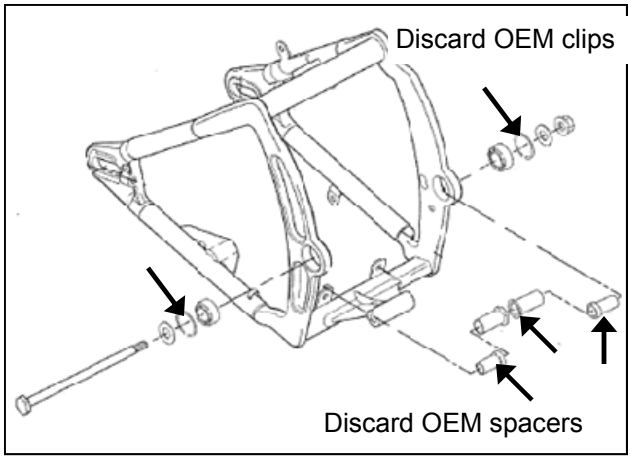


Fig. 2

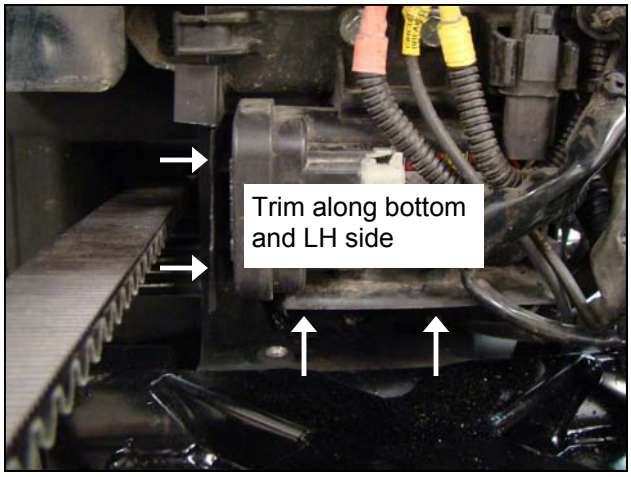
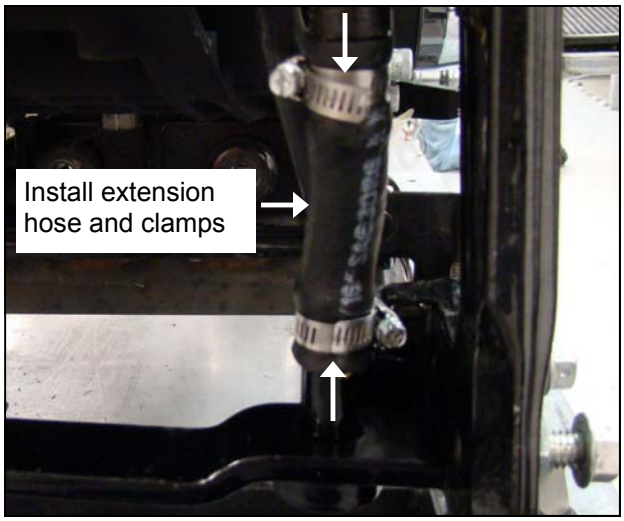


Fig. 3



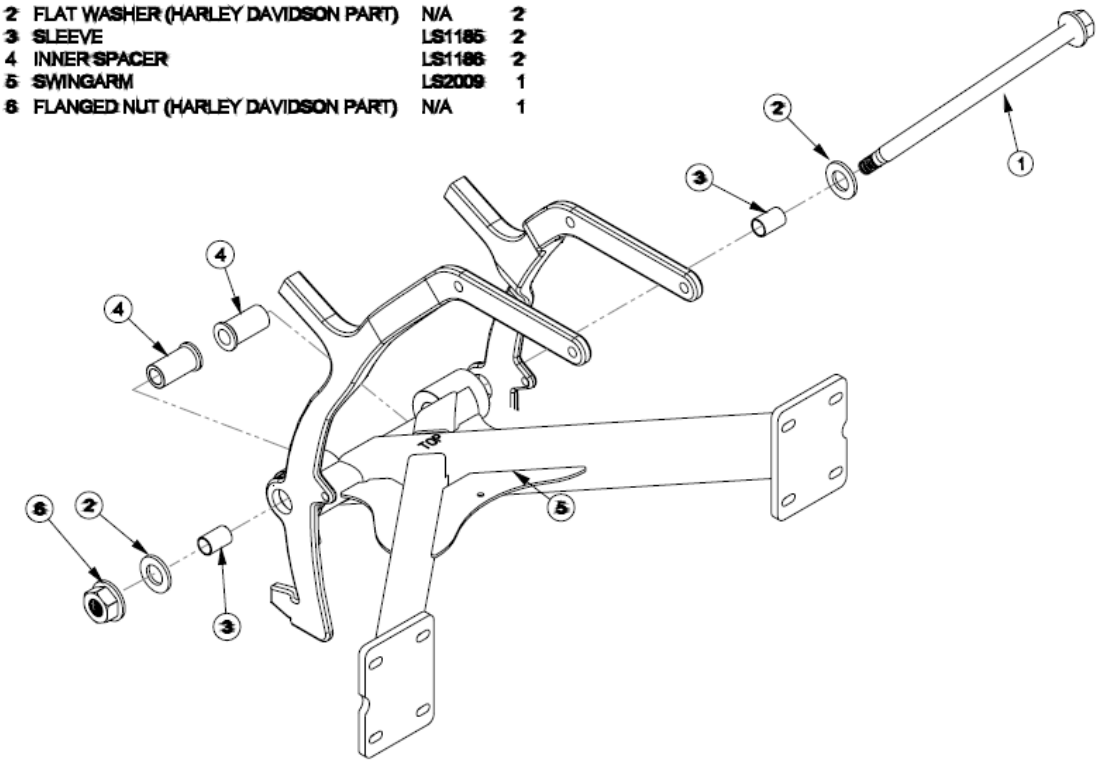
8. **See Fig 4**. Install the inner spacers (LS1186) to the inside of the swingarm collars. Install the outer spacers or sleeves (LS1185) through the bearings.

Note: Apply anti-seize to pivot shaft before installing.

9. Install the Lehman swingarm with word "TOP" (stamped in swingarm collar) facing upward. Reinstall the original swingarm pivot shaft washers and nut. Use Loctite 262 on nut.
10. Torque swingarm bolt to **90 – 110 ft-lbs.** Make sure swingarm moves freely up and down with no side to side movement. Light resistance is normal.

Fig. 4

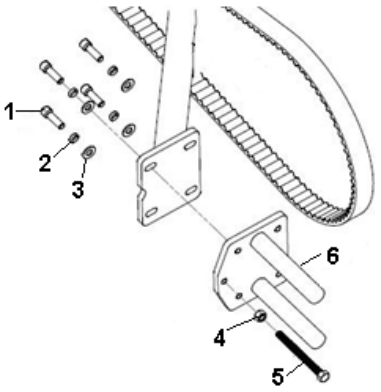
1	PIVOT BOLT (HARLEY DAVIDSON PART)	N/A	1
2	FLAT WASHER (HARLEY DAVIDSON PART)	N/A	2
3	SLEEVE	LS1185	2
4	INNER SPACER	LS1186	2
5	SWINGARM	LS2009	1
6	FLANGED NUT (HARLEY DAVIDSON PART)	N/A	1



Differential Installation

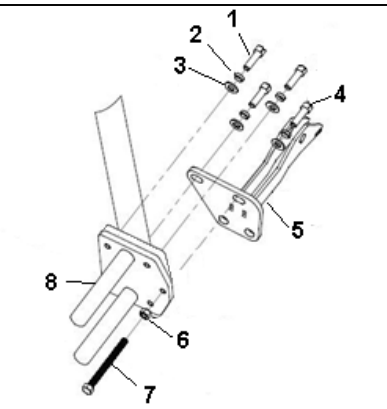
1. **See Fig. 1.** Attach LH adapter plate (LP1038) to swingarm as shown. Leave hardware loose.
2. **See Fig. 2**. Attach RH adapter plate to swingarm as shown with park brake bracket mounted to lower holes. Leave hardware loose.
3. **See Fig. 1 and 2.** Install 3/8" nut to adjuster bolt and thread into adapter plate from backside. Run bolt completely into adapter plate.

Fig. 1



Item	Part #	Qty.	Desc.
1	CB1241	4	3/8" x 1 1/4" NC SKT. HD. BOLT
2	CW2052	4	3/8" HIGH COL. LOCK WSHR.
3	CW2017	4	3/8" FLAT WASHER
4	CN3011	1	3/8" NC NUT
5	CB1297	1	3/8" x 4 NC ADJUSTER BOLT
6	LP1038	1	ADAPTER PLATE

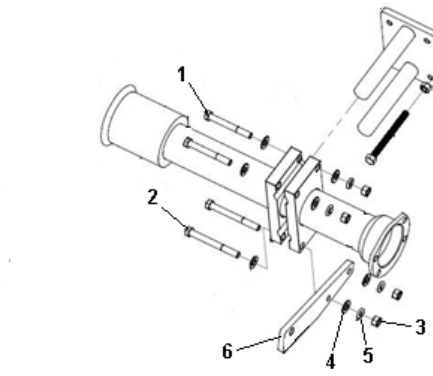
Fig. 2



Item	Part #	Qty.	Desc.
1	CB1241	4	3/8" x 1 1/4" NC SKT. HD. BOLT
2	CW2052	4	3/8" HIGH COL. LOCK WSHR.
3	CW2017	4	3/8" FLAT WASHER
4	CB1248	2	3/8" x 1 1/2" NC SKT. HD. BOLT
5	LB1292	1	PARK BRAKE BRACKET
6	CN3011	1	3/8" NC NUT
7	CB1297	1	3/8" x 4 NC ADJUSTER BOLT
8	LP1038	1	ADAPTER PLATE

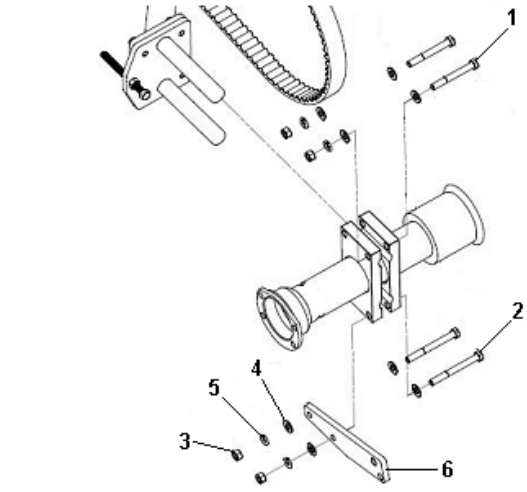
4. **See Fig. 3 and 4**. Loosely install hardware to pinch blocks **before** installing differential to swingarm.

Fig. 3



Item	Part #	Qty.	Desc.
1	CB1276	2	3/8" X 3" NF GR. 8 BOLT
2	CB1286	2	3/8" X 3 1/2" GR. 8 BOLT
3	CN3016	4	3/8" NF GR. 8 NUT
4	CW2015	8	3/8" GR. 8 FLAT WASHER
5	CW2050	4	3/8" LOCK WASHER
6	LP1032	1	SHOCK MOUNT PLATE

Fig. 4



Item	Part #	Qty.	Desc.
1	CB1276	2	3/8" X 3" NF GR. 8 BOLT
2	CB1286	2	3/8" X 3 1/2" GR. 8 BOLT
3	CN3016	4	3/8" NF GR. 8 NUT
4	CW2015	8	3/8" GR. 8 FLAT WASHER
5	CW2050	4	3/8" LOCK WASHER
6	LP1032	1	SHOCK MOUNT PLATE

5. Support swingarm with jack stands.
6. **See Fig. 5.** With differential assembly on lift, slide belt over LH axle tube and against center housing.
7. **See Fig. 5**. Set differential assembly on swingarm adapter plates. Slide differential as far forward as possible. Set jack stands under axle tubes.
8. Tighten pinch block hardware just enough to allow differential to slide on swingarm adapter plates.
9. **See Fig. 5**. Remove upper, lower and rear housing plates.
10. **See Fig. 6**. Carefully slide belt over pulley.
11. Reinstall housing plates with original hardware using Loctite 242. Install all hardware before tightening. Torque hardware to **17 ft. lbs.**

Fig. 5

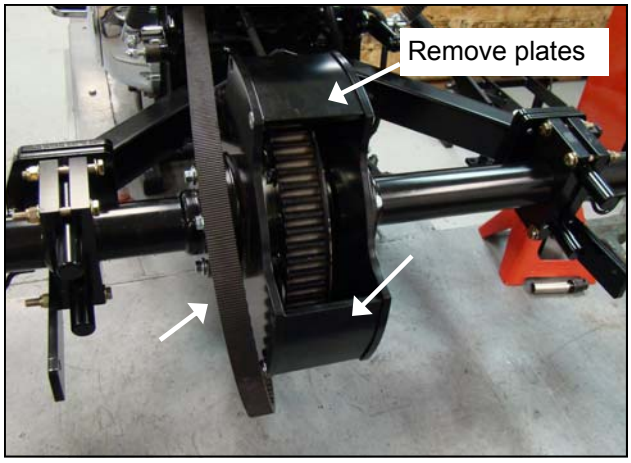
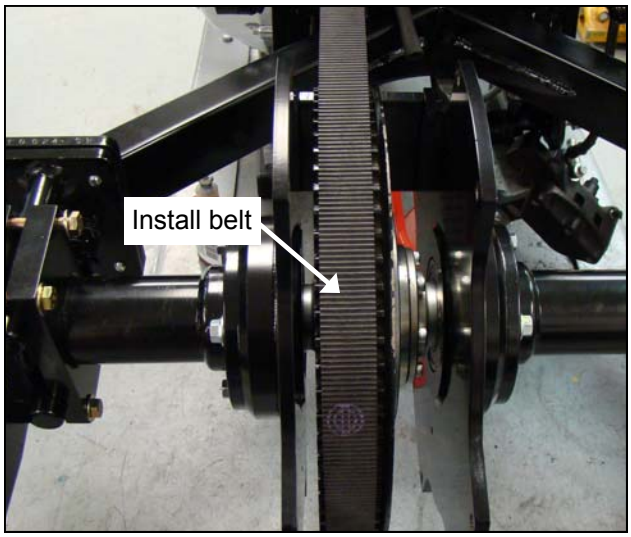
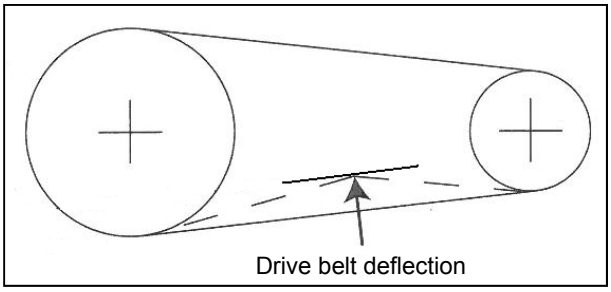


Fig. 6



Belt Tensioning and Tracking

Fig. 2



1. Center differential to motorcycle frame– **this is critical for proper belt tensioning**. Make sure distance is within 1/16" from side to side.
2. Level swingarm to motorcycle frame. This will help achieve proper ride height.
3. **See Fig. 1**. Using adjusters, push differential assembly back until belt has about 3/8" slack with **10 lbs**. pressure at midpoint of bottom run. Measure between adapter plates and pinch blocks to ensure that distances are equal.
4. Rotate pulleys forward for at least 3 revolutions of rear pulley by pulling backwards on bottom run of belt. Pull belt straight back to get an accurate reading. Check that belt is running about **0.030"** from flange on rear pulley. Tap differential left or right to achieve this reading. Belt may ride next to flange as long as it's not trying to climb.
5. Tighten socket head screws (8) that hold adapter plates to swingarm and torque to **35 ft. lbs**.
6. Once tracking is obtained, re-check belt tension. Raise and lower differential assembly slowly with a jack while checking belt tension. When tightest position is located, apply 10 lbs. force at midpoint of lower strand of belt. **Correct deflection is 5/16" - 3/8".**
7. Increase or reduce belt deflection by turning adjuster screw on each side in or out an equal number of turns.
8. Look along top of belt to check belt alignment on front pulley. There should be about 0.030" clearance between pulley flange and belt. If adjustment is required, loosen cap screws that hold adapter plate to swingarm and tap differential housing with rubber mallet in desired direction. Check rear alignment and belt tension again if adjustment is required.

Note: If necessary, apply chalk to edge of belt to aid in getting proper clearance between belt and pulley flanges. If visible clearance cannot be obtained, be sure belt is not climbing up the side of pulleys or squeaking as belt is rotated.

9. After all adjustments are made, tighten adjuster lock nuts and tighten pinch block bolts. Tighten pinch blocks in a crosswise pattern. Go over both sides at least 2 times to seat blocks over pins. Torque bolts to **25 ft. lbs.**

Disc Brakes

Warning: Brake pads must seat to rotors for brakes to work properly. Stopping power will be very weak for first series of stops, with improvements after every stop until brakes work at full capacity.

Brake System

1. **See Fig. 1.** Attach brass tee to differential brace using the following hardware.
   - (1) Brass Tee– CF5105
   - (1) Spacer– S001530
   - (2) 1/4" x 1-3/4" Hex Bolt– CB1100
   - (2) 1/4" Flat Washers– CW2005
   - (2) 1/4" Lock Nut– CN3042
2. **See Fig. 1**. Install original brake line from master cyclinder and rear braided lines to brass tee using the following hardware. Torque banjo bolt to **16 ft. lbs.**
   - (1) Banjo Bolt– S002022
   - (2) Banjo Washers- GC6002
   - (2) 45" M10 Braided Line– S001976
3. **See Fig. 2**. Install (2) braided brake lines to rear calipers as shown. Torque bolts to **16 ft. lbs**.
   - (2) M10 Banjo Bolt– CB6001
   - (4) M10 Banjo Washers- GC6002
4. Secure brake lines to swingarm with cable ties.

Fig. 1

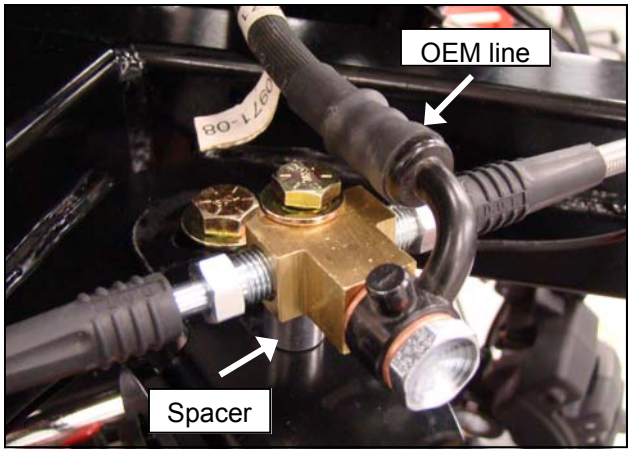
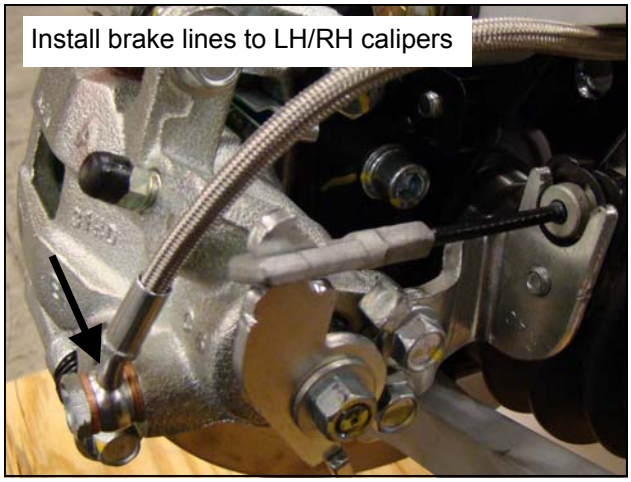


Fig. 2

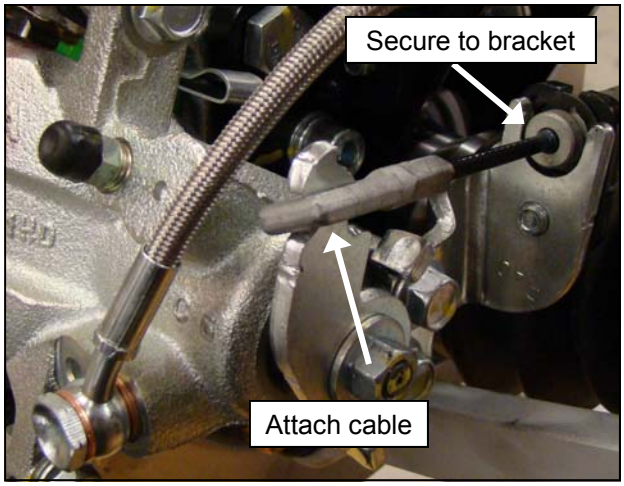


6. Add brake fluid (refer to OEM reservoir cap for brake fluid requirements) to brake system and work brakes to fill lines.
7. Remove rubber caps on bleeder valves. Install clear brake bleeder hose over bleeder valve on caliper.
8. Pump brake pedal to build hydraulic pressure.
9. While holding the brake pedal, open bleeder valve to release pressure and remove air from system. Repeat bleeding on both calipers until fluid is solid without bubbles in bleeder hose.
10. Tighten bleeder valves and check for leaks.
11. Install master cylinder reservoir cap with new screws. **Do not over tighten cap screws.**

Park Brake Assembly

1. **See Fig. 3.** Install park brake cable to caliper brackets. Secure cable to bracket with cir-clip provided on cables.

Fig. 3



2. **See Fig. 4.** Remove snap ring from one side of large clevis pin on brake lever. Hold park brake lever on its side and push release button at end of park brake lever to allow clevis pin to slide out.
3. **See Fig. 4**.Place park brake lever within park brake bracket, ensuring ratchet is secure on cross brace. Attach with large clevis pin.
4. **See Fig. 4**. Attach park brake cable pulling bracket to brake lever using small clevis pin and cotter pin.
   - (1) Cable Pulling Bracket– LB1294
   - (1) Clevis Pin– CC3106
   - (1) Cotter Pin- CC4017
5. **See Fig. 5.** Route left park brake cable above differential and under motorcycle frame, attaching cable ties to cable and frame, and install in left hole in handle mount.
6. **See Fig. 6.** Route right park brake cable up around axle and forward to right hole in handle mount.
7. **See Fig. 6**. Secure both cables to upper rear pinch block with clamp (GC0108).
8. **See Fig. 7**. Secure cable retaining nuts to handle mount with 7/8" wrench.
9. Check for tire clearance.
10. **See Fig. 7.** Thread one 5/16" NF nut onto each brake cable. Place threaded end of brake cables through holes in cable bracket. Thread second nut onto each brake cable.
11. Adjust park brake cables at handle to engage at 3–4 clicks.

Note: Take up slack in cables before tightening ends to ensure good adjustment range with threaded end of brake cables.

Fig. 4

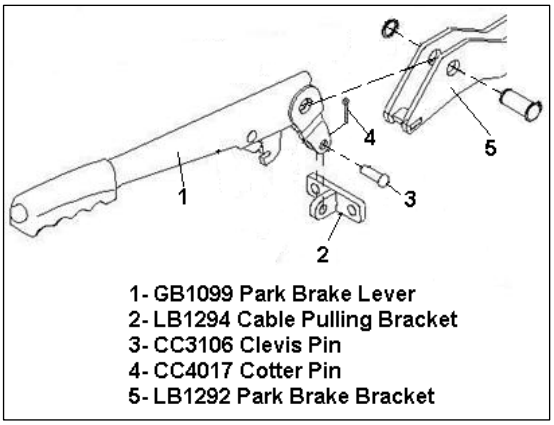


Fig. 5

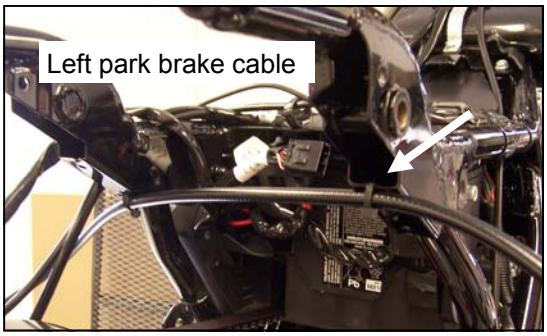


Fig. 6

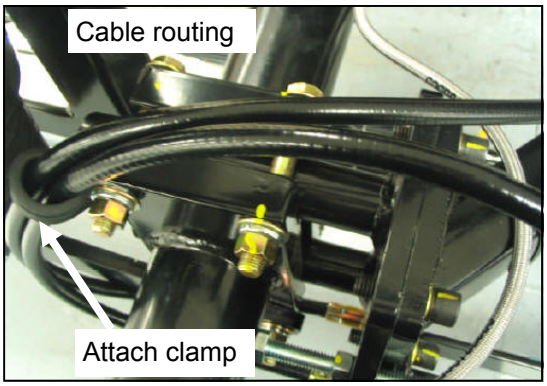
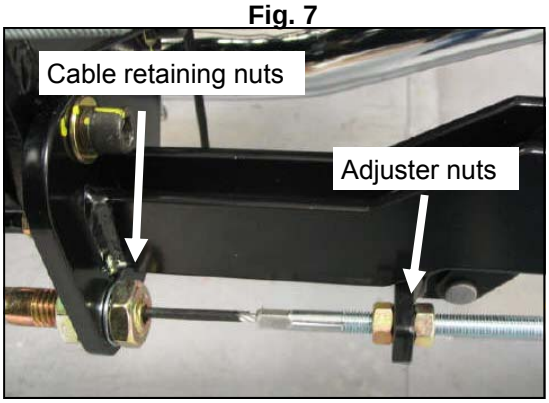


Fig. 7



Frame Installation

1. **See Fig. 1 & 2**. Install trike frame to motorcycle frame using shim plates as needed. ECM/ Fuse box brackets(LB1117 & LB1137) will also be installed to inside of motorcycle frame. Attach using 3/8" x 2" bolts, flat washers, and lock nuts through front mounting holes.

Note: FOR 2003 MOTORCYCLES: Two bushing (LB1288) are supplied for the rear holes in the motorcycle frame.

2. Install 3/8" x 1 3/4" bolts, flat washers and lock nuts through center holes.
3. Install 3/8" x 1 1/2" bolts, flat washers and lock nuts through rear holes.
4. Level the frame to the axle before tightening the bolts.
5. Torque 3/8" frame bolts to 31 ft. lbs.
6. **See Fig. 3.** Attach ECM plastic to brackets as needed. ECM/Fuse box will vary by year.

Fig. 1

Fig. 2

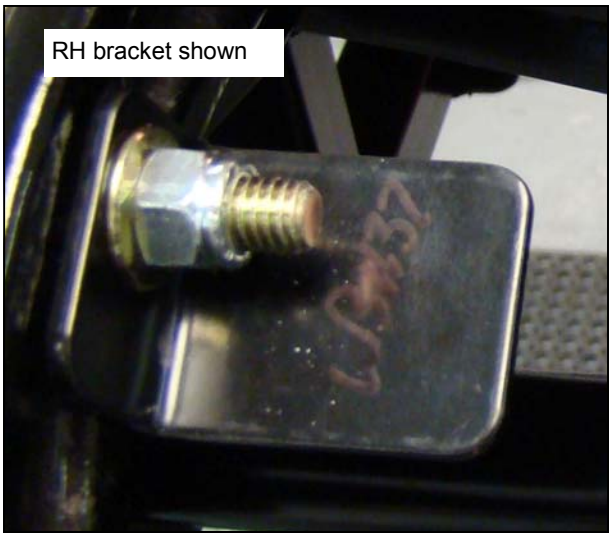
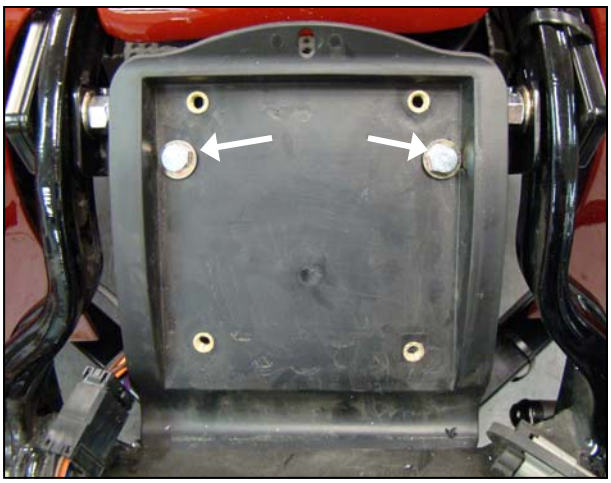


Fig. 3



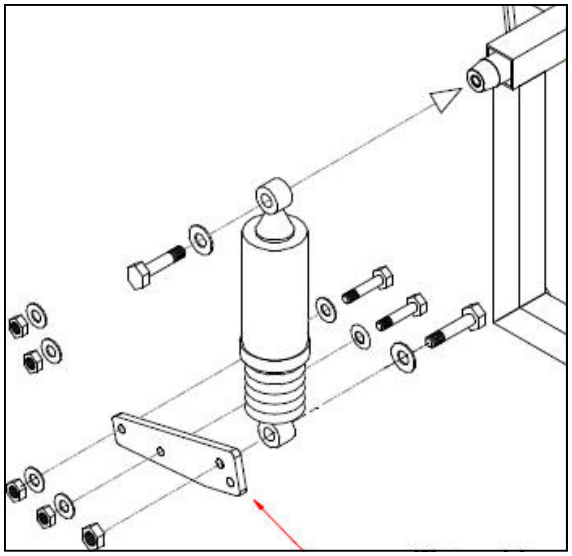
Shock Installation

1. **See Fig. 1.** Lower differential and install 1/2" X 2 1/4" bottom shock bolt with bushing (GB0320) through lower shock eye and thread it into shock plate. Use (1) washer under head of bolt. Torque bolt to **40 ft.-lbs.** and secure bolt with lock nut.

Note: Do not install flat washer under lock nut.

2. **See Fig. 1.** Raise differential and install top of shock with bushing (GB0320) using 1/2" X 2 1/4" bolt, lock washers and (1) washer under head of bolt. Shock should run parallel to frame tube when viewed from rear. Torque shock bolts to **40 ft.-lbs.**

Fig. 1



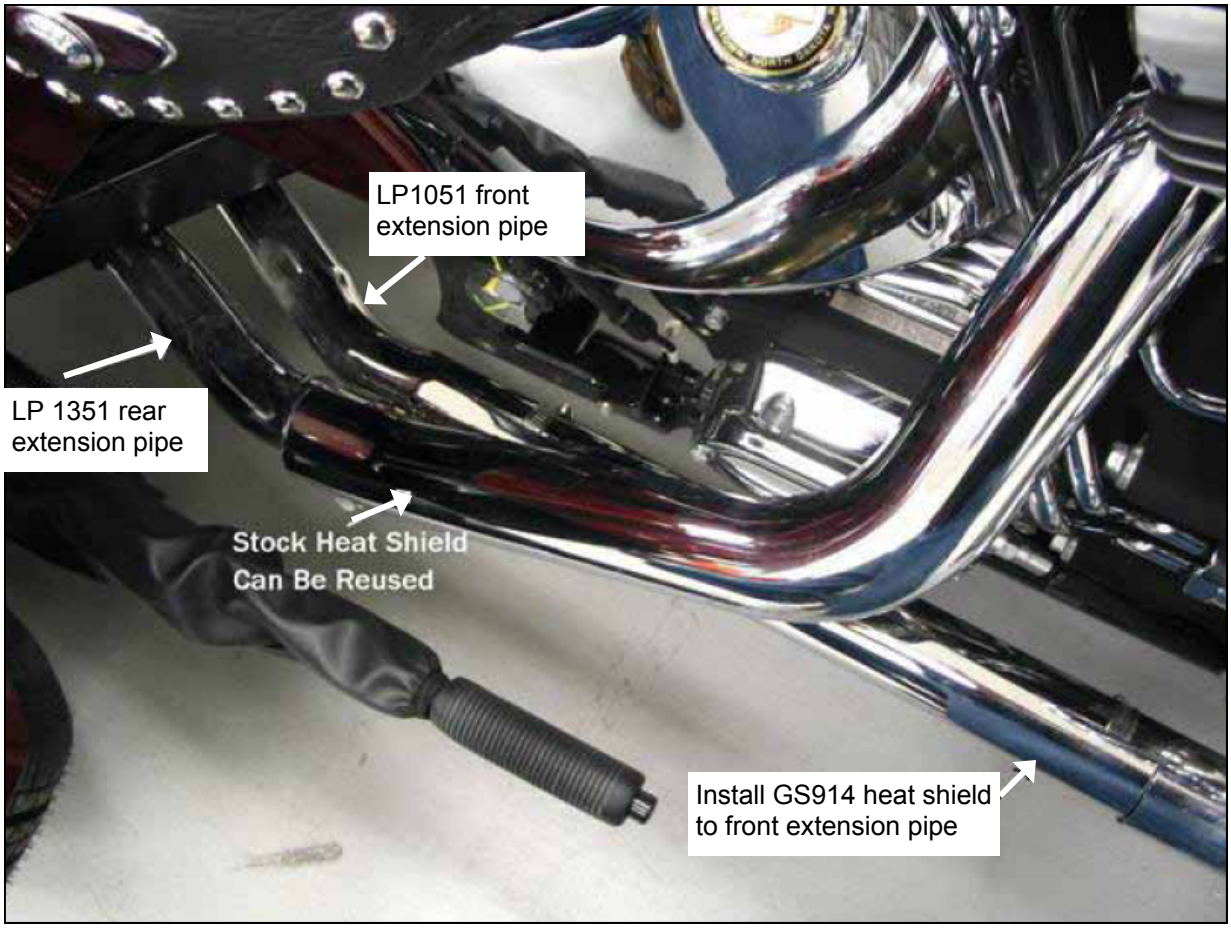
Exhaust System

Note: Fat Boy models will use different mounting brackets.

1. Reinstall rear cylinder pipe.
2. Install long extension pipe (LP1051) to front cylinder pipe.
3. Install short extension pipe (LP1351) to rear cylinder pipe.
4. Mount exhaust bracket (LB1247) to tab on underside of Lehman frame. Use (2) 3/8" bolts (CB1235), flat washers (CW2015), lock washers (CW2050) and nuts (CN3015).

Note: Trim extension pipes if necessary.

5. Hold mufflers in place on frame bracket and measure amount to be removed from extension pipes. Cut extension pipes as needed.
6. Using original hardware, insert mufflers onto pipes and mount to exhaust bracket. Be sure to install exhaust crossover pipe (LP1046).
7. Position and tighten all exhaust clamps.
8. Install OEM heat shields and trim as needed.
9. Install Lehman heat shield (GS914) to front extension pipe.


LP1051 front extension pipe
LP 1351 rear extension pipe
Stock Heat Shield Can Be Reused
Install GS914 heat shield to front extension pipe

Renegade Wiring Harness

1. **See Fig.'s 1-2.** Attach wiring harness to body clips on underside of body.
2. Connect 8 position connector on wiring harness **(Fig. 3)** to OEM harness, located under rider seat at rear of OEM frame.

Fig. 1

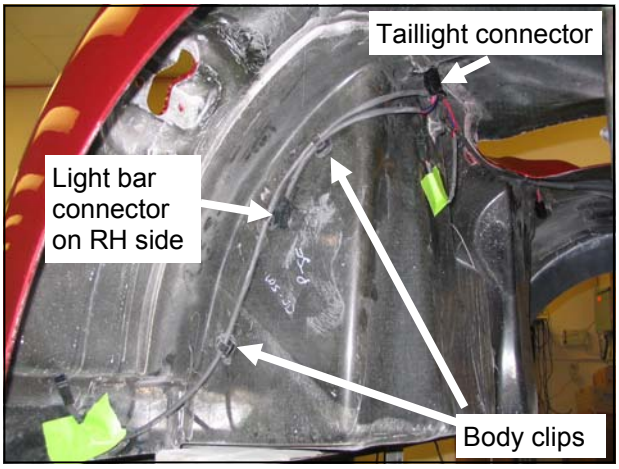


Fig. 2

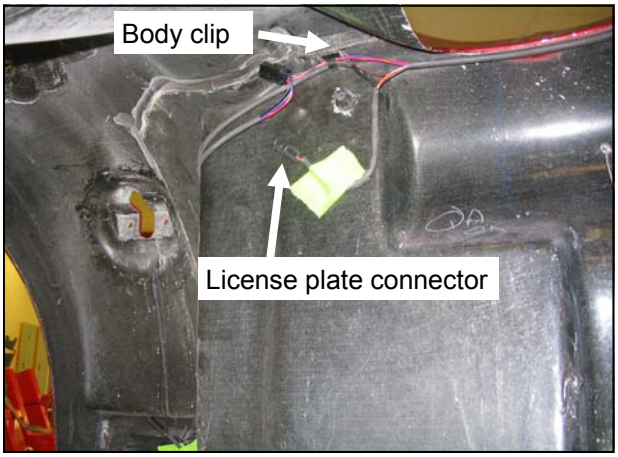
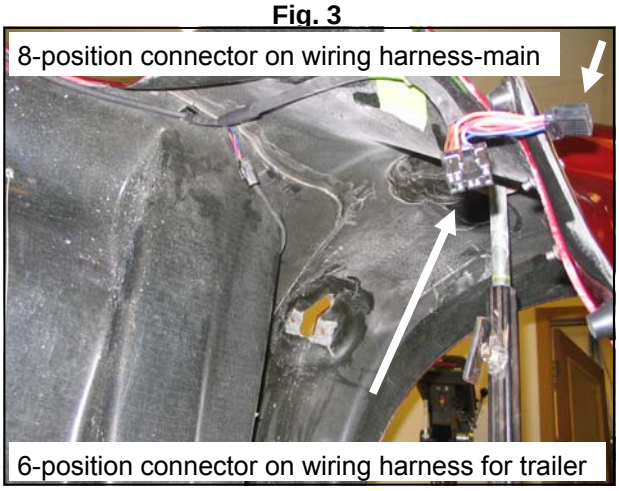


Fig. 3



3. **See Fig.'s 4-5**. Before connecting brake lights, license plate and light bar (optional) to harness, terminals and connectors will need to be installed to each before connecting to wiring harness. Use appropriate tool for crimping terminals to wires. (Mac Tools– TCT1028, Blue Point– PWC47 or H-D 41609).
4. See Fig. 5. Inspect crimps before installing into connector. Distortion should be minimal.

Fig. 4

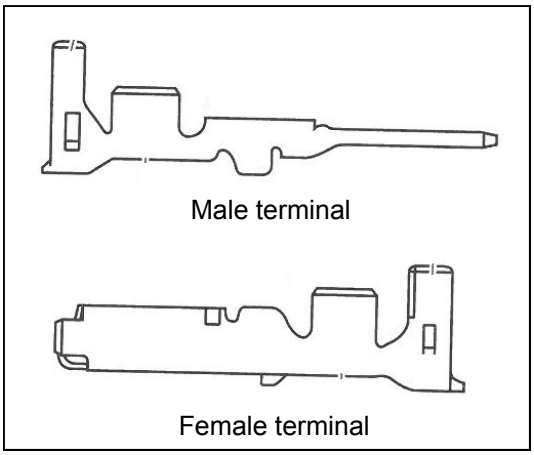
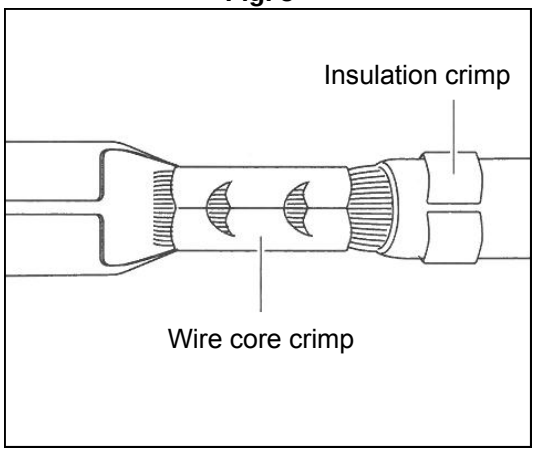


Fig. 5



Lights and Wiring

Caution: Use care with painted surfaces

1. **See Fig. 1**. Drill 15/16" hole for turn signal on flat below taillight. Center turn signal with inside edge of taillights. Mount H-D turn signals using original bolts with supplied washers (CW2001).

NOTE: Do not over tighten taillight mounting hardware. Damage to housing may occur.

2. **See Fig 2.** Mount taillight assemblies to body with gaskets. Attach ground wire to stud with flange nut after taillight mounting hardware is installed.
    - (2) Taillight Assembly-S002204
    - (2) Gaskets– BG0200
    - (4) 1/4" Flat Washer– CW2006
    - (4) Lock washer– Provided with light
    - (4) Nut– Provided with light
    - (2) 1/4" Flange Nut– CN3007
3. **See Fig's 3 & 4. If required-** Install female terminals and male connectors to taillight wiring Use appropriate tool for crimping terminals to wires. (Mac Tools– TCT1028).
4. **See Fig's 3 & 4**. Inspect crimps before installing into connector. Distortion should be minimal.

Fig. 1

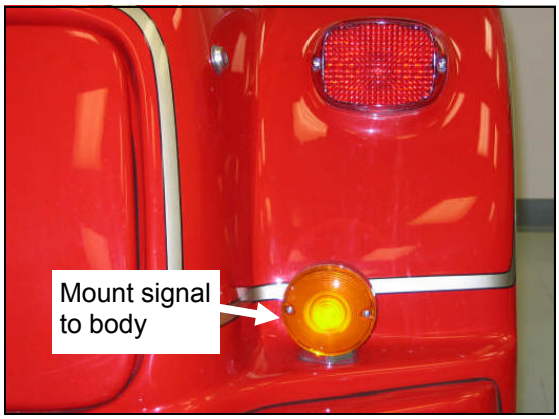


Fig. 2

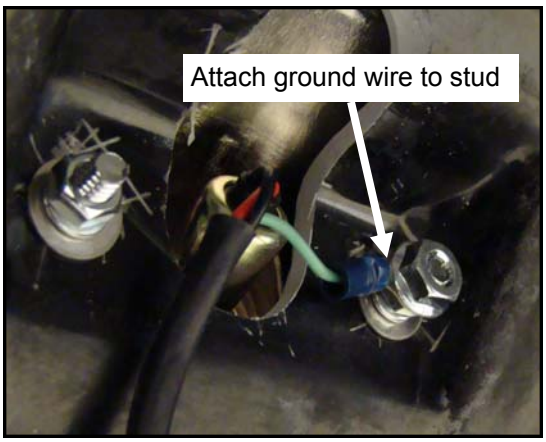


Fig. 3

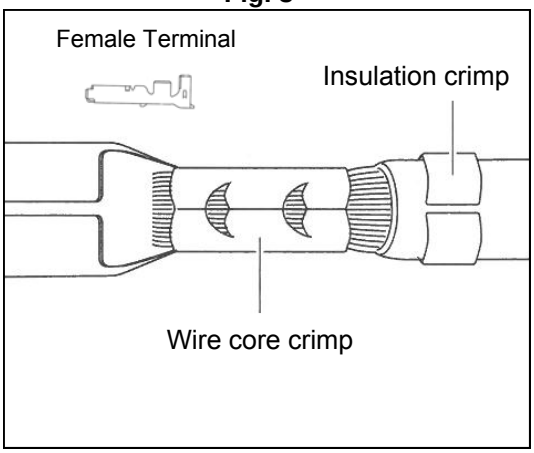
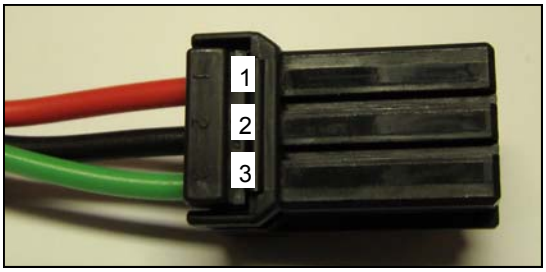


Fig. 4



5. **See Fig. 5**. Install license plate bracket to door with 1/4" x 1" bolts, washers, lock nuts and rubber washers. Use rubber washers between bracket and door. Install U-nuts to bracket
    - (2) 1/4" x 1" Button head bolt (CB1086)
    - (2) 1/4" Rubber washer (FG1002)
    - (2) 1/4" Flat washer (CW2005)
    - (2) 1/4" Lock nut (CN3040)
    - (2) 1/4" U-nut (CN3301)
6. **See Fig. 6.** Install license plate light and support plate to bracket using (2) 1/4" x 1 bolts.
   See Fig. 5. Run wiring through lower hole in door .
    - (1) License plate light (S001469)
    - (1) Support plate (S001601)
    - (2) 1/4" x 1 Button head bolt (CB1086)
    - (2) M6 Flat washer- CW2175
7. **See Fig. 6**. Install lower license plate mounting hardware into place on support bracket using 1/4" x .50" bolts and (2) lock nuts
    - (2) 1/4" x .50 Button head bolt (CS4032)
    - (2) 1/4" Lock nut (CN3040)
8. Solder and heat shrink light wiring to trunk wiring harness. Attach wire as follows-
    - **Black** wire on light to **Black** wire on trunk harness
    - **Red** wire on light to **Red** wire on trunk harness
9. Seal wiring through door with silicone (Ultra Black).

Fig. 5

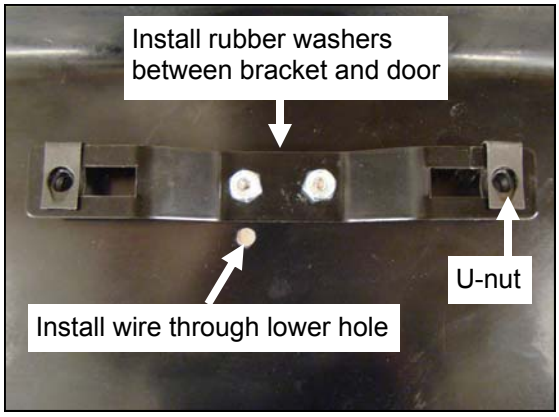


Fig. 6

Fig. 5

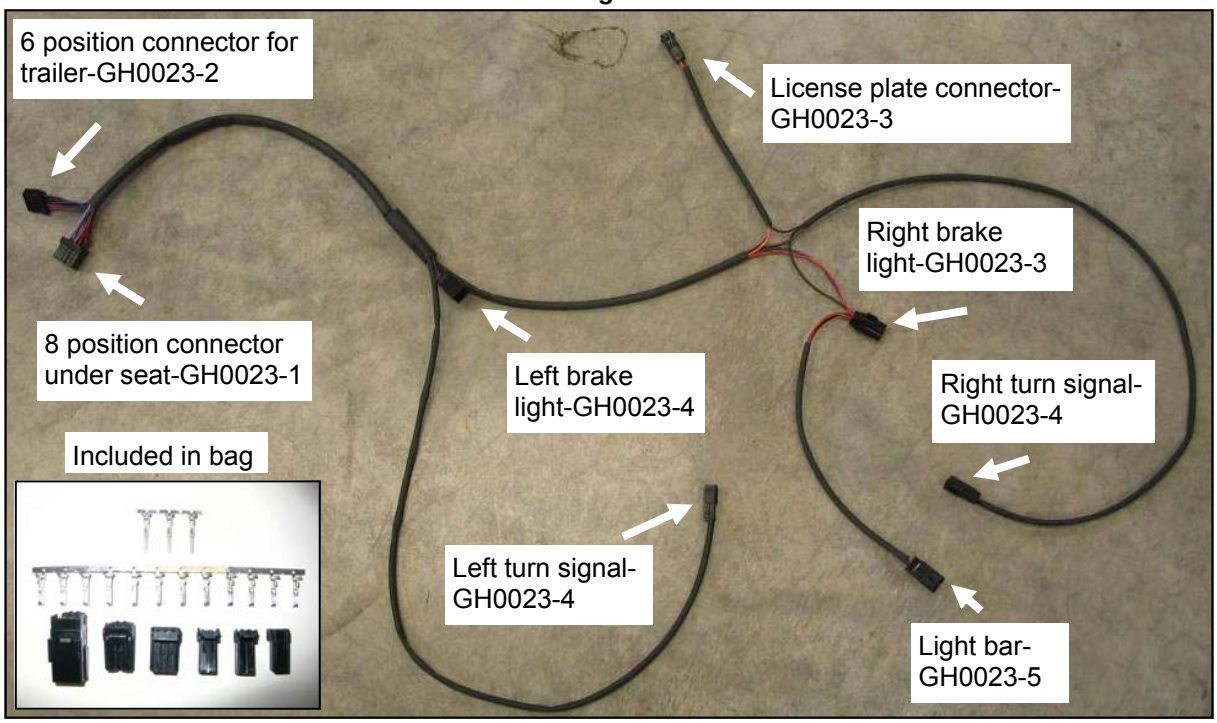
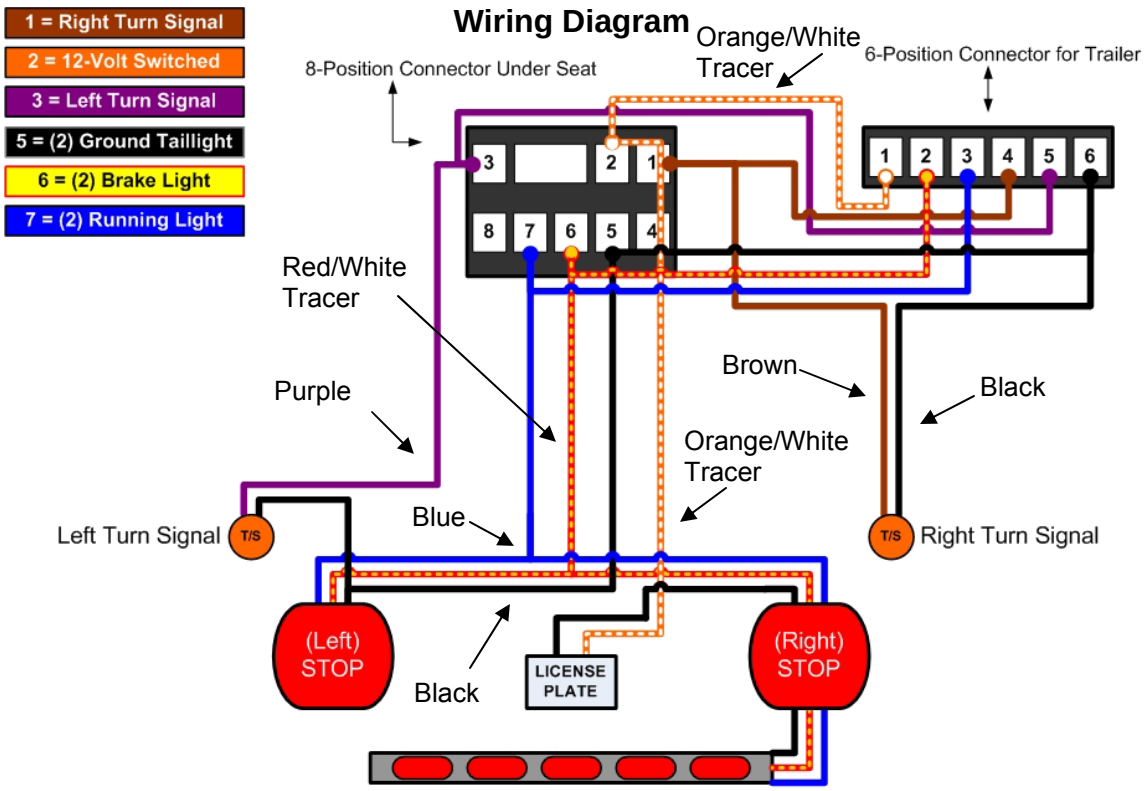

6 position connector for trailer-GH0023-2
License plate connector-GH0023-3
Right brake light-GH0023-3
8 position connector under seat-GH0023-1
Left brake light-GH0023-4
Right turn signal-GH0023-4
Included in bag
Left turn signal-GH0023-4
Light bar-GH0023-5

Fig. 6


1 = Right Turn Signal
2 = 12-Volt Switched
3 = Left Turn Signal
5 = (2) Ground Taillight
6 = (2) Brake Light
7 = (2) Running Light
Wiring Diagram
8-Position Connector Under Seat
Orange/White Tracer
6-Position Connector for Trailer
Red/White Tracer
Purple
Brown
Black
Orange/White Tracer
Blue
Left Turn Signal
T/S
Right Turn Signal
(Left) STOP
Black
LICENSE PLATE
(Right) STOP

Fitting Body

Caution: Carefully set body on trike frame.

1. Install side covers to motorcycle using original hardware from frame.
2. Center body from side-to-side and front-to-back using a carpenter square against tire. Make sure side covers have an even gap on both sides and do not rub on body.
3. From underside of body, drill a 1/4" hole in body through each of four mounting tabs. Keep hole centered in slot of each of tabs.
4. Fasten body to Lehman frame as follows: Head of bolt will be inside trunk.
   - (4) 1/4" x 1-1/2" Button Head Bolts- CS4031
   - (4) 1/4" x 1 1/4" Fender Washers- CW2108
   - (4) Foam Sealing Washers- FG1002
   - (4) 1/4" Flat Washers- CW2007
   - (4) 1/4" Lock Nuts- CN3041
5. **See Fig. 5.** Install upper body braces (LB1235) by attaching slotted side on top of Lehman frame using the following hardware. Leave hardware loose.
   - (2) Body Brace– LB1235
   - (2) 5/16" x 1" Bolts– CB1161
   - (2) 5/16" Lock Washers– CW2047
   - (2) 5/16" Flat Washers– CW2010
6. Slide bracket against trunk, mark and drill 1/4" hole.
7. Attach bracket to body using the following hardware.
   - (2) 1/4" x 1-1/2" button head bolts- CS4031
   - (2) 1/4" x 1 1/4" fender washers CW2108
   - (2) Foam Sealing Washers FG1002
   - (2) 1/4" Flat Washers- CW2007
   - (2) 1/4" Lock Nuts- CN3041
8. Tighten 5/16" hardware into place on trike frame.
9. Verify all body mounting hardware is tight.

Fig. 1

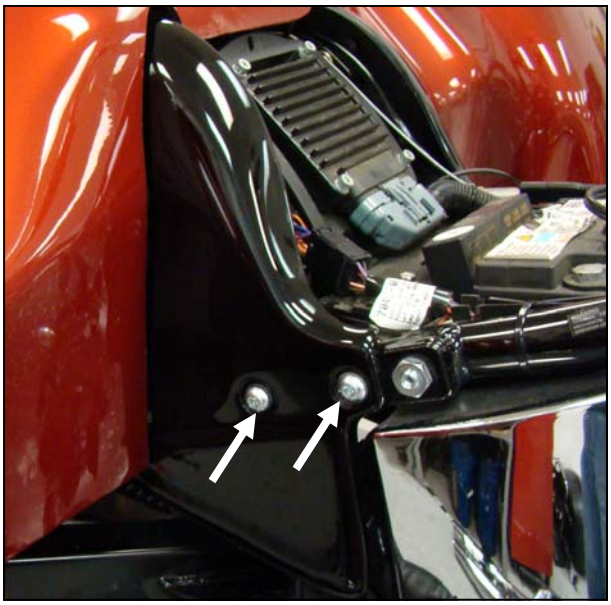
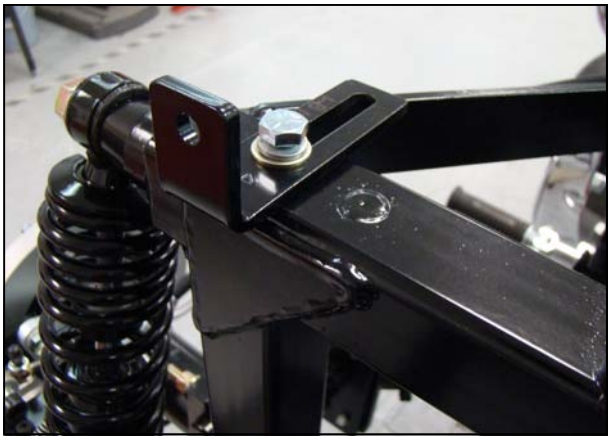


Fig. 2



Trunk Door Installation

Note: Lip on weather seal will face away from door opening; top of seal is flush with top of door.

1. **See Fig. 1**. Install door seal around edge of body, starting at center on bottom and following trunk opening. Trim seal ends straight with scissors; glue ends together when finished.
   - (6') Door Seal– CW2536
2. **See Fig. 2**. Insert lanyard through top bend on cable stop bracket. Make a small loop in the end of lanyard and crimp using aluminum clip (see inset in Fig. 2). There should be 7-1/2" between the crimp and pre-made end of lanyard. Verify both lanyards match before crimping.
   - (2) Door Lanyard– S001686
   - (2) Cable Bracket– FB1036
   - (2) Aluminum Crimp– CC1900
3. Apply masking tape to body just below hinge mounting holes to prevent scratching of paint by hinges.
4. **See Fig. 3.**Install door hinges and stop cable brackets to body with hinge gaskets underneath hinge using 10/32" x 1" screws and plated star nuts.
   - (2) Door Hinge– GH0903
   - (2) Hinge Gaskets– FG1003
   - (4) 10/32" x 1" Phillips Screws– CS4024-0
   - (4) Plated Star Lock Nuts– CN1898
5. Fasten door to hinges using 10/32" x 3/8" screws.
   - (4) 10/32 x 3/8" Phillips Screws– CS4024-1
6. Attach lanyard to door using shoulder screws with M6 flat washer under cable end.
   - (2) 1/4" x .438 Shoulder Screws– CB1151
   - (2) M6 Flat Washer– CW2172
7. **See Fig. 3.**Torque shoulder screws to 6 ft-lbs using 5/32" Allen socket.

Fig. 1

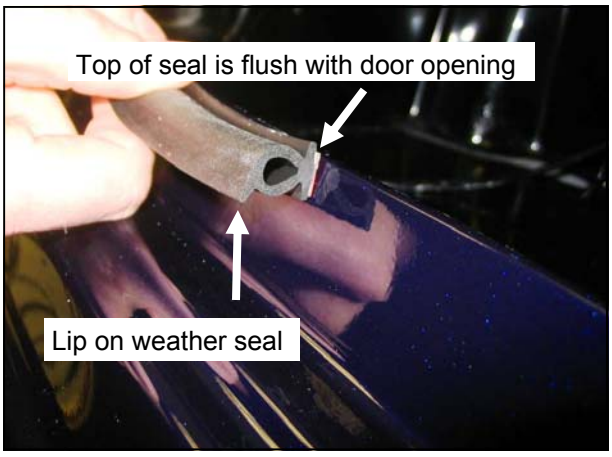


Fig. 2

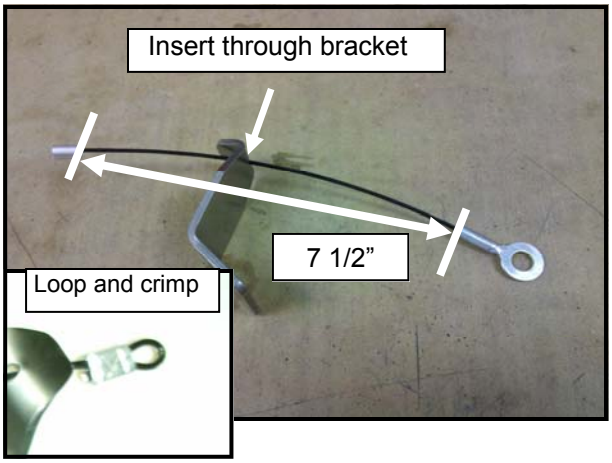


Fig. 3

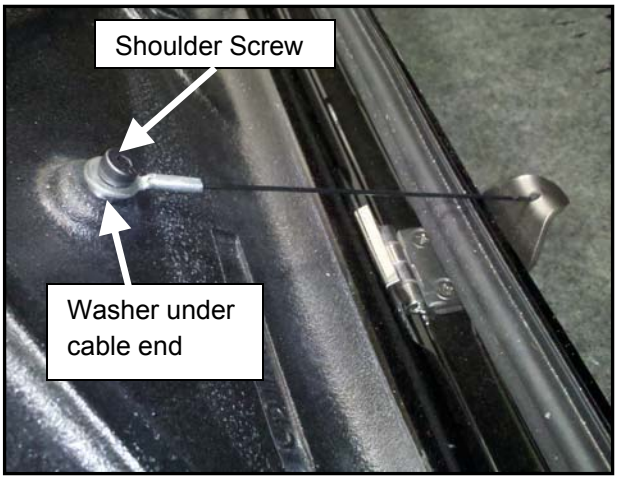
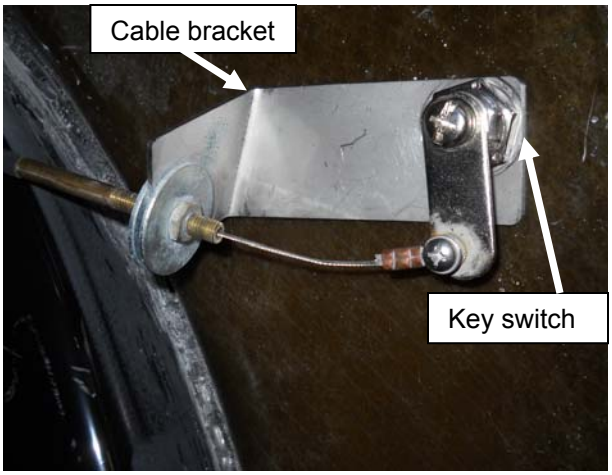
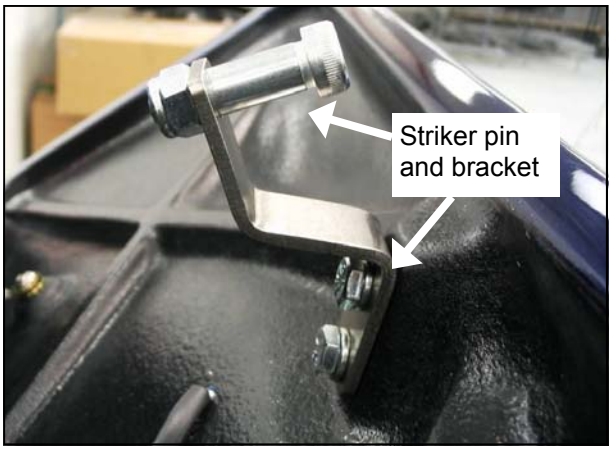


Fig. 4



8. **See Fig. 4** Install key switch through body.
9. **See Fig. 4** Install latch cable bracket onto key switch.
10. **See Fig. 4** Install large nut to rear door key switch using 7/8" wrench and adjust bracket in an upright position.
11. **See Fig. 4**.Attach cable to key mechanism while key is in vertical position with head of screw from cable facing out.
12. **See Fig. 5**. Install striker pin to striker bracket using 5/16" lock nut .
    - (1) Striker Pin– GL2041
    - (1) Striker Bracket– LB1297
    - (1) 5/16" Lock Nut– CN3045

Fig. 5



13. Attach striker pin bracket to door using 1/4" lock washers and 1/4" bolts .
    - (2) 1/4" x 1/2" Bolts– CB1075
    - (2) 1/4" Lock Washers– CW2040
14. Install Renegade badge to bottom right side of door. Install Lehman badge GB1320 to bottom left side of door.
    - (1) Renegade Badge– GB1324
    - (1) Lehman Badge– GB1320
15. Cut license plate wire from body to length to reach body wiring as needed.
16. Install shrink tubing over license plate wires.
17. Strip and solder ends of license plate wires from the body and door together.
18. Slide shrink tubing over soldered connections and heat.
19. Solder and heat shrink light wiring to trunk wiring harness. Attach wire as follows-
    - **White** wire on light to **Black** wire on trunk harness
    - **Gray** wire on light to **Red** wire on trunk harness
20. Secure wiring to trunk door.

Door Adjustment Procedures

Fig. 6

① Make sure Striker pin Lines up with latch up and down, as well as side to side, or door will not close properly, and may make door leak.

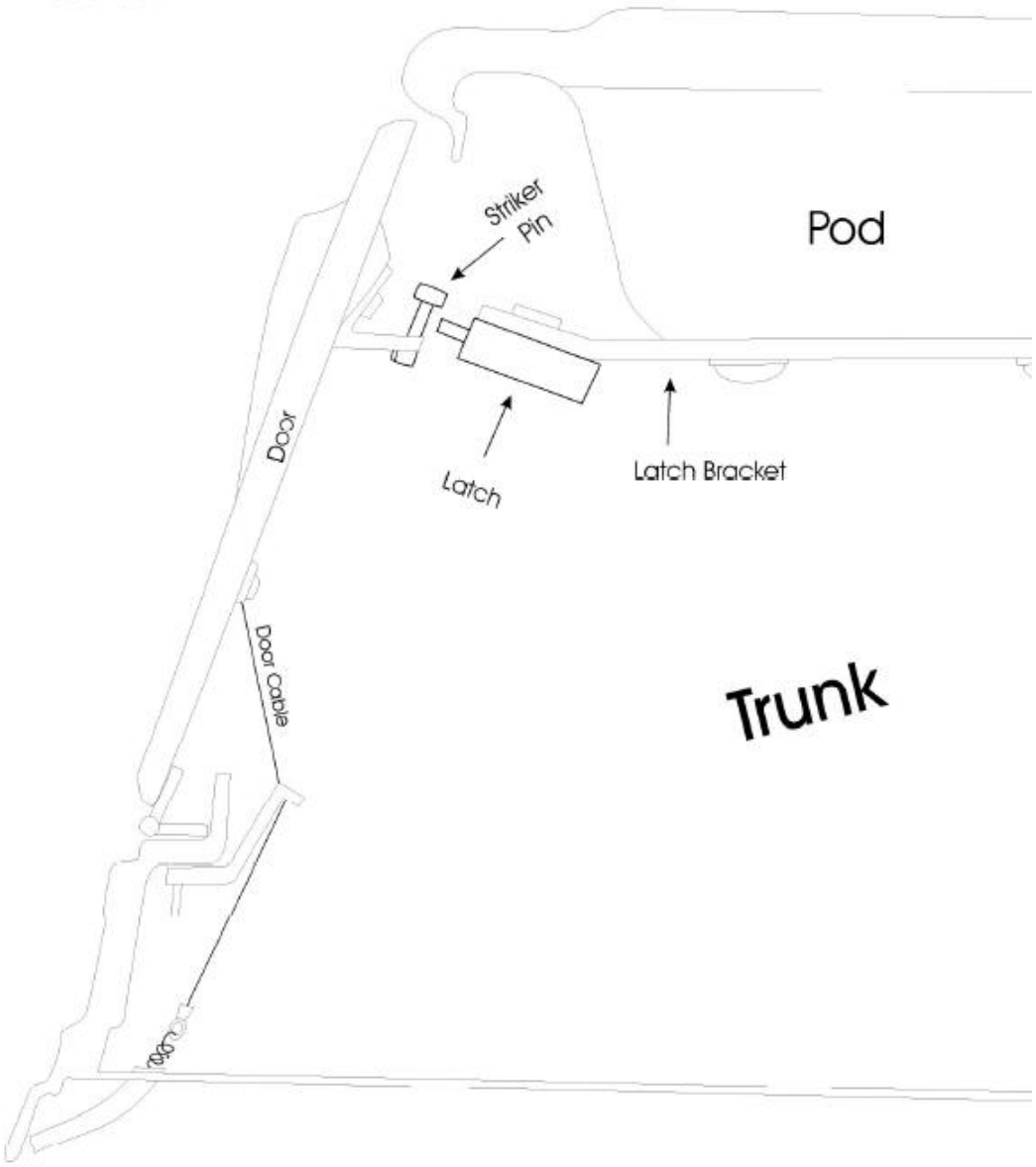


Fig. 7

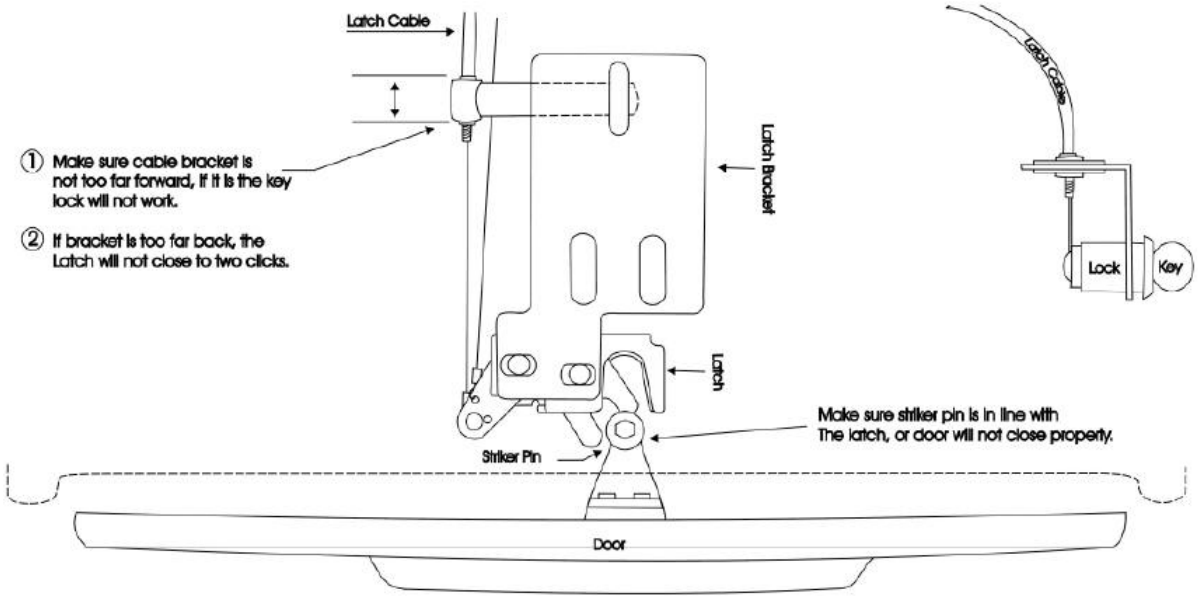
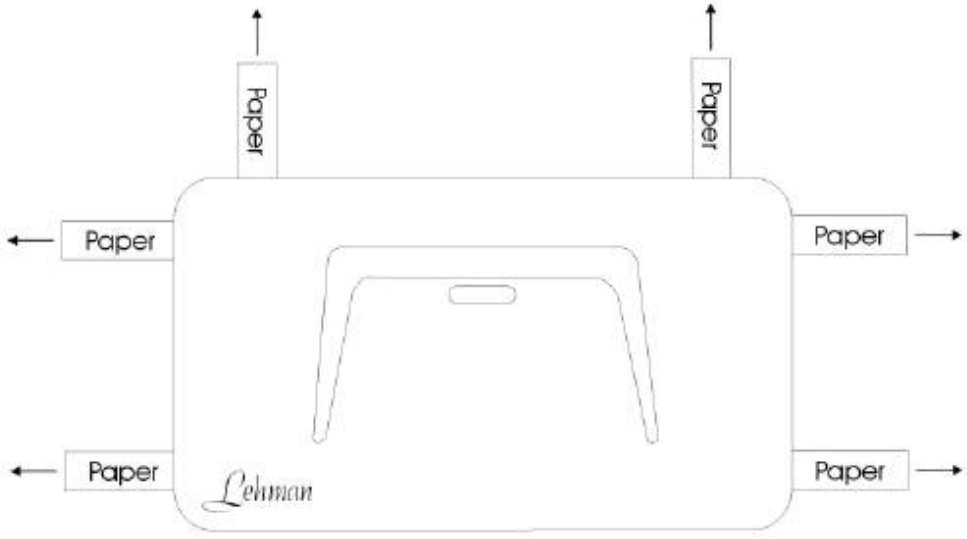

Latch Cable
① Make sure cable bracket is not too far forward, if it is the key lock will not work.
② If bracket is too far back, the Latch will not close to two clicks.
Latch Bracket
Latch Cable
Lock
Key
Latch
Make sure striker pin is in line with The latch, or door will not close properly.
Striker Pin
Door

Fig. 8

1

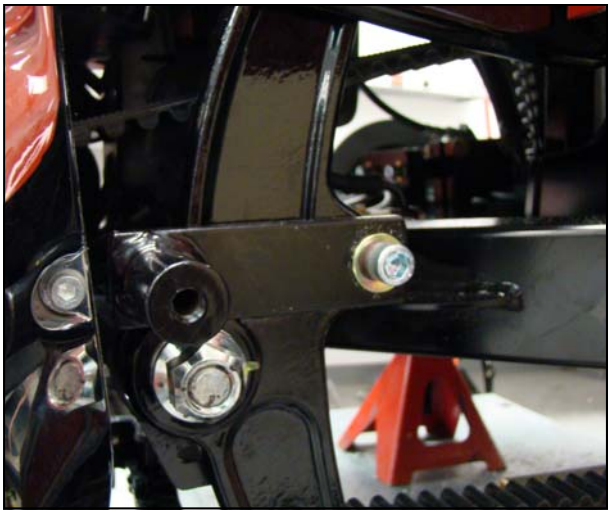
To make sure you have a good door seal, use a piece of paper. Put paper between door and weather seal. Close door and then tug on the paper. If the paper does not come out with ease, you have a good seal; and if it does, adjust your door and try again.



Relocating Passenger Foot Pegs

1. Install foot peg brackets (LR0176) to the frame using the following hardware.
   - (2) 3/8” x 1-1/4” Socket Head Bolts
   - (2) 3/8” High Collar Lock Washers
   - (2) 3/8” Flat Washers
2. Brackets will rest on the upper forward edge of the swing arm pin boss. Use the factory mounting hardware to mount the foot pegs to the bracket.

Fig. 1



Final Assembly

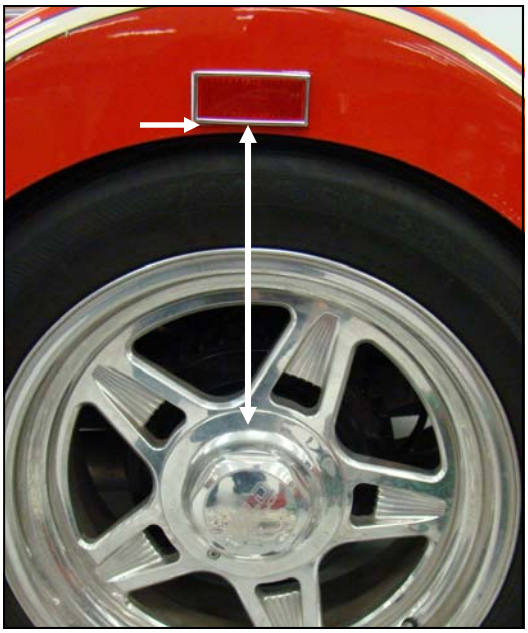
1. Set seat in place and align to body. Mark location on body and drill hole for 1/4-20" rubber well nut.
2. Install seat using 1/4-20" button head bolt.
3. Install wheels. Torque wire wheel lug nuts to **75 ft.-lbs**. and aluminum wheel lug nuts to **85 ft.-lbs.** Install center caps (if applicable).

Caution: Do not use an impact wrench when installing lug nuts.

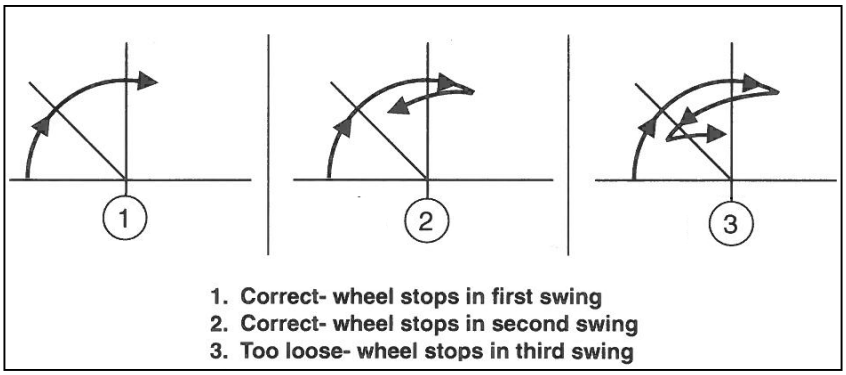
4. Reflectors can be installed to body. **See Fig. 1.** Install rear reflectors 3" below taillights on body. **See Fig. 2**. Install side reflectors using wheel center caps as a reference, 1/4" above wheel opening on body.

Fig. 1

Fig. 2



Neck Race Preload,
Steering head should be approximately twice as tight as factory specifications for a trike conversion. Refer to H-D service manual for adjustment procedure.
Caution: Do not tighten bolts past factory specifications. Only bearing adjustment collar should be tightened past factory settings.



1. Correct- wheel stops in first swing
2. Correct- wheel stops in second swing
3. Too loose- wheel stops in third swing

Renegade Torque Specifications

Axle flange bolts	38 ft. lbs.
Park brake bracket to swingarm	35 ft. lbs.
Pinch block bolts	25 ft. lbs.
Adapter plate to swingarm	35 ft. lbs.
Banjo bolts	16 ft. lbs.
Lehman frame to H-D frame	31 ft. lbs.
Shock bolts	40 ft. lbs.
Wheels/aluminum	85 ft. lbs.
Wheels/wire	75 ft. lbs.
Caliper to bracket bolts	38 ft. lbs.
Caliper bracket to axle flange bolts	38ft. lbs.

Final Trike Inspection

	Good	Rework
1. Reflectors Installed	□	□
2. Lights and horn work	□	□
3. Park brake operation	□	□
4. Engine/Transmission oil levels	□	□
5. Belt tension 5/16”-3/8”	□	□
6. Wheel torque **85 ft. lbs. (75 ft. lbs.-wire)**	□	□
7. Rear tire pressure **26 psi**	□	□
8. Front tire pressure **36 psi**	□	□
9. Trunk clean and dry	□	□
10. Trunk door seals and operates smoothly	□	□
11. Shocks set @ mid setting	□	□
12. Heat shields, side covers	□	□
13. Renegade/Lehman badge installed	□	□
14. Accessories (if applicable)	□	□
15. No paint defects	□	□
16. Warranty/owner’s manual included	□	□